WHAT IS CLAIMED IS:

1. A method for controlling communications among a plurality of terminals coupled to each other to form a network in which a mixture of isochronous data and anisochronous data is serially transmitted, said method comprising:

a step of dividing time into cycles, and providing an isochronous region and an anisochronous region for each cycle;

a step of, after each terminal transmitting, for each cycle, the isochronous data using said isochronous region in a time division manner, determining by a destination terminal whether the isochronous data has been successfully received; and

a step of, when there is any terminal that has not successfully received the isochronous data, instructing an originating terminal of the isochronous data to retransmit the isochronous data using said anisochronous region.

2. The communications control method according to claim 1, wherein

each terminal transmits the isochronous data with an error detection code added thereto, and the destination terminal checks the error detection code after receiving the isochronous data, and

said determination step is performed based on a check result.

3. The communications control method according to claim 1, wherein

each terminal transmits the isochronous data as divided into blocks, and

said determination step is performed for each block, and said instructing step is performed for each block.

4. The communications control method according to claim 1, wherein

in said instructing step, when there are the terminals that have not successfully received the isochronous data, the originating terminals of the isochronous data are sequentially instructed to retransmit the isochronous data using the anisochronous region in the time division manner.

5. The communications control method according to claim 1, wherein

in said instructing step, when there are the terminal that have not successfully received the isochronous data, transmission times are collectively reported to the originating terminals of the isochronous data so that the originating terminals retransmit the isochronous data using the anisochronous region in the time division manner.

6. The communications control method according to

claim 1, wherein

each terminal modulates the isochronous data before transmission, and

in said instructing step, the originating terminal is instructed to retransmit the isochronous data after changing a modulation scheme used in modulation.

7. The communications control method according to claim 1, wherein

each terminal encodes the isochronous data before transmission, and

in said instructing step, the originating terminal is instructed to retransmit the isochronous data after changing a coding rate used in encoding.

8. The communications control method according to claim 1, wherein

each terminal encodes and modulates the isochronous data before transmission, and

in said instructing step, the originating terminal is instructed to retransmit the isochronous data after changing a coding rate used in encoding and a modulation scheme used in modulation.

9. The communications control method according to

claim 1, wherein

each terminal carries out multicast transmission of the isochronous data to the terminals that belong to respective specific groups,

in said determination step, it is determined whether the isochronous data has been successfully received by all terminals that belong to the group destined to receive the isochronous data, and

in said instructing step, when there is one or more terminals that have not successfully received the isochronous data in the group, the originating terminal is instructed to carry out multicast retransmission of the isochronous data to all of the terminals that belong to the group.

10. The communications control method according to claim 1, wherein

each terminal carries out broadcast transmission of the isochronous data to all of other terminals,

in said determination step, it is determined whether the isochronous data has been successfully received by all terminals destined to receive the isochronous data, and

in said instructing step, when there is one or more terminals that have not successfully received the isochronous data, the originating terminal is instructed to carry out broadcast retransmission of the isochronous data to all of the

terminals.

11. The communications control method according to claim 1, further comprising the step of

dividing the isochronous region into dedicated regions, assigning the dedicated regions to the terminals respectively, and reporting, to each terminal, information about the dedicated region before a start of a head of the cycle, thereby enabling transmission of the isochronous data for each cycle by each terminal using said isochronous region in the time division manner.

12. The communications control method according to claim 1, further comprising the step of

dividing the isochronous region into dedicated regions, assigning the dedicated regions to the terminals respectively, and sequentially instructing, for each cycle at respective times corresponding to the dedicated region, the terminals to transmit the isochronous data, thereby enabling transmission of the isochronous data for each cycle by each terminal using said isochronous region in the time division manner.

13. The communications control method according to claim 1, further comprising the step of

giving an inquiry to the destination terminal about

whether the isochronous data has been successfully received, wherein

said determination step is carried out based on a response to an inquiry.

14. The communications control method according to claim 1, wherein

the destination terminal spontaneously gives a response about whether the isochronous data has been successfully received, and

said determination step is carried out based on the response.

15. The communications control method according to claim 1, wherein

said instructing step is carried out repetitively until the isochronous data is successfully received.

16. The communications control method according to claim 15, further comprising the step of

suspending retransmission of the isochronous data even though reception error is not cleared when a time consumed by one more retransmission presumably exceeds a predetermined maximum time allowed, for each cycle, to be consumed for retransmitting the isochronous data.

17. The communications control method according to claim 16, wherein

said maximum time is less in value than a time length of the anisochronous region.

18. The communications control method according to claim 17, wherein

said maximum time is equal in value to a time length of the anisochronous region.

19. The communications control method according to claim 17, further comprising the step of

retransmitting, in the anisochronous region of a next cycle, the isochronous data whose retransmission is suspended.

20. The communications control method according to claim 15, further comprising the step of

suspending retransmission of the isochronous data even though reception error is not cleared when the number of times of retransmission exceeds a predetermined maximum number of times of retransmission of the isochronous data.

21. A communications control apparatus for controlling communications among a plurality of terminals coupled to each other to form a network in which a mixture of isochronous

data and anisochronous data is serially transmitted, said apparatus comprising:

means for dividing time into cycles, and providing an isochronous region and an anisochronous region for each cycle;

means for, after each terminal transmitting, for each cycle, the isochronous data using said isochronous region in a time division manner, determining by a destination terminal whether the isochronous data has been successfully received; and

means for, when there is any terminal that has not successfully received the isochronous data , instructing an originating terminal of the isochronous data to retransmit the isochronous data using said anisochronous region.

22. A program having a communication control method described as can be read by a computer, said method for controlling communications among a plurality of terminals coupled to each other to form a network in which a mixture of isochronous data and anisochronous data is serially transmitted, said method comprising the steps of:

dividing time into cycles, and providing an isochronous region and an anisochronous region for each cycle;

after each terminal transmitting, for each cycle, the isochronous data using said isochronous region in a time division manner, determining by a destination terminal whether the isochronous data has been successfully received; and

when there is any terminal that has not successfully received the isochronous data, instructing an originating terminal of the isochronous data to retransmit the isochronous data using said anisochronous region.

23. A recording medium on which a communications control program having a communication control method described as can be read by a computer, said method for controlling communications among a plurality of terminals coupled to each other to form a network in which a mixture of isochronous data and anisochronous data is serially transmitted, said method comprising the steps of:

dividing time into cycles, and providing an isochronous region and an anisochronous region for each cycle;

after each terminal transmitting, for each cycle, the isochronous data using said isochronous region in a time division manner, determining by a destination terminal whether the isochronous data has been successfully received; and

when there is any terminal that has not successfully received the isochronous data, instructing an originating terminal of the isochronous data to retransmit the isochronous data using said anisochronous region.